

## Patent claims

1.-9. (cancelled)

10. (new) A network, comprising:

communication components having associated addresses, wherein

the communication components are adapted to communicate with one another by using the addresses, wherein

a first plurality of the communication components has resources, the resources comprising a communication service usable in the network, wherein

search functions are integrated in a second plurality of the communication components for ascertaining the addresses of such communication components having resources, wherein

each search function is adapted to send a first search message which prompts each communication component reached by the first search message to return a hit response containing its address, wherein

each search function is further adapted to send at least a second search message comprising information about required resources to at least one of the ascertained communication components, wherein

at least one of the ascertained communication components which is able to provide the required resources responds to the second search message, wherein

the response to the second search message contains information about the communication service, and wherein

the communication components responding to the second search message forward the second search

message to other communication components.

11. (new) The network as claimed in claim 10, wherein the communication components are adapted to store details about the resources of the communication components which can be used in the network.

12. (new) The network as claimed in claim 10, wherein the second search message is designed to ascertain the information stored in a communication component about the usable resources of the communication components, wherein the response to this search message comprises the addresses and use-related details.

13. (new) The network as claimed in claim 11, wherein the second search message is designed to ascertain the information stored in a communication component about the usable resources of the communication components, wherein the response to this search message comprises the addresses and use-related details.

14. (new) The network as claimed in claim 10, wherein the communication components are adapted to disable or enable access to individual or all inherent resources of a communication component.

15. (new) The network as claimed in claim 11, wherein the communication components are adapted to disable or enable access to individual or all inherent resources of a communication component.

16. (new) The network as claimed in claim 12, wherein the communication components are adapted to disable or

enable access to individual or all inherent resources of a communication component.

17. (new) The network as claimed in claim 10, wherein the communication components are designed to respond to the first and the second search messages.

18. (new) The network as claimed in claim 11, wherein the communication components are designed to respond to the first and the second search messages.

19. (new) The network as claimed in claim 12, wherein the communication components are designed to respond to the first and the second search messages.

20. (new) The network as claimed in claim 10, wherein the search function of a communication component is adapted such that it sends at least one first search message and continues to send second search messages until a sought resource has been found in the network and the information transmitted in the response to one of the second search messages allows the use of the resource.

21. (new) The network as claimed in claim 11, wherein the search function of a communication component is adapted such that it sends at least one first search message and continues to send second search messages until a sought resource has been found in the network and the information transmitted in the response to one of the second search messages allows the use of the resource.

22. (new) The network as claimed in claim 12, wherein the search function of a communication component is adapted such that it sends at least one first search message and continues to send second search messages until a sought resource has been found in the network and the information transmitted in the response to one of the second search messages allows the use of the resource.

23. (new) The network as claimed in claim 10, wherein the addresses of communication components which have been obtained from the hit response and from the response to second search messages can be used to set up communication links.

24. (new) The network as claimed in claim 11, wherein the addresses of communication components which have been obtained from the hit response and from the response to second search messages can be used to set up communication links.

25. (new) The network as claimed in claim 12, wherein the addresses of communication components which have been obtained from the hit response and from the response to second search messages can be used to set up communication links.

26. (new) The network as claimed in claim 10, wherein the response comprises a type and a number of available resources and/or available communication services and also a type of an inherent network access, including bandwidth and availability, and a location information.

27. (new) The network as claimed in claim 11, wherein the response comprises a type and a number of available resources and/or available communication services and also a type of an inherent network access, including bandwidth and availability, and a location information.

28. (new) A method for autonomously administrating a network having communication components which have associated addresses and which communicate with one another using these addresses, wherein some of the communication components have resources, the resources comprising a communication service which can be used in the network, the method comprising:

determining the addresses of communication components which have resources by using search functions integrated in some of the communication components, wherein each of the search functions determines the addresses by sending a first search message which prompts each communication component reached by the first message to return a hit response containing its address;

sending at least one second search message comprising information about required resources to at least one of the determined communication components by the search function, wherein at least one of the communication components which is able to provide the required resources responds to the second search message, wherein the response to the second search message contains specific information about the communication service; and

forwarding the second search message to other communication components by the communication components which respond to the second search message.